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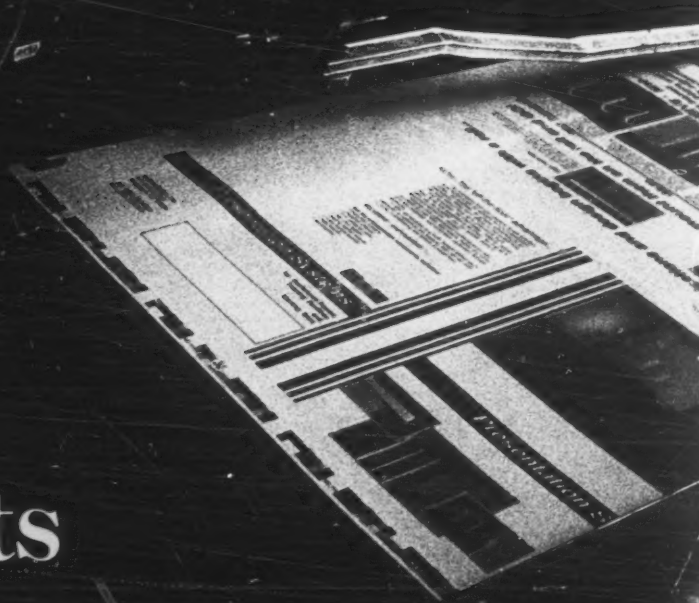
THE MAGAZINE OF THE PRINTING INDUSTRY



Improved Folders Offer Added Benefits In Output

Geography of Print: New England

SPC, New Language of Ink

VOLUME 62, NUMBER 2

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graphic arts monthly

THE MAGAZINE OF THE PRINTING INDUSTRY

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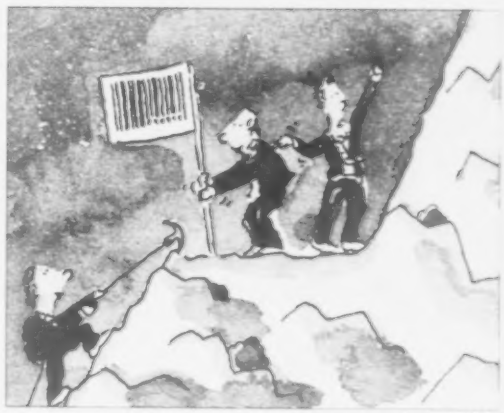

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In Printing, Machinery Trade Deficit Has Risen

The dollar appreciated about 2% in 1989, as measured by a trade-weighted index of 16 major currencies. The rise was over 7% against European currencies, but the Canadian dollar strengthened 2.8%, resulting in a smaller overall gain for the U.S. dollar. Cahners Economics forecasts a stable dollar in 1990, almost unchanged from its average 1989 level.

This stability should aid in further reducing the U.S. merchandise trade deficit. In 1989, the trade deficit was reduced by $13.2 billion (1982 dollars). With little movement in the dollar this year, further improvement in the trade deficit will be harder to achieve.

In 1990, imports will climb 2.6% and exports will increase just over 4%. As a result, the trade deficit is expected to fall $8.7 billion to $53 billion (1982 dollars) in 1990.

In the printing industry, however, the stable dollar won't provide assistance to the printing machinery trade deficit. Import and export data through August 1989 show a deficit of $259 million. Since the U.S. has just now shifted to international standards for trade data—the harmonized system—the 1989 data is not comparable to data of previous years.

But by comparing the export-to-import ratio for each time period, it is possible to get an idea of the relative size of the trade deficit. In the first eight months of 1989, the value of exports was 70% of the value of imports. This represents a decline from 1988, when this percentage was 80%. With weakening export demand (relative to imports), it is likely the trade deficit for printing machinery has risen.

Final third-quarter GNP figures indicate the economy grew 3.0%, when annualized between July and September of 1989. Still, there are clear signs that the economy is headed toward slower growth. In particular, business investment has begun to slow down, especially on the equipment side. After increasing by 10% in the first quarter and 15% during the second quarter, equipment expenditures increased at only a 5% pace during the third quarter. In addition, the falling off of merchandise exports also signals a slower-growing economy.

GENERAL ACTIVITY INDICATORS

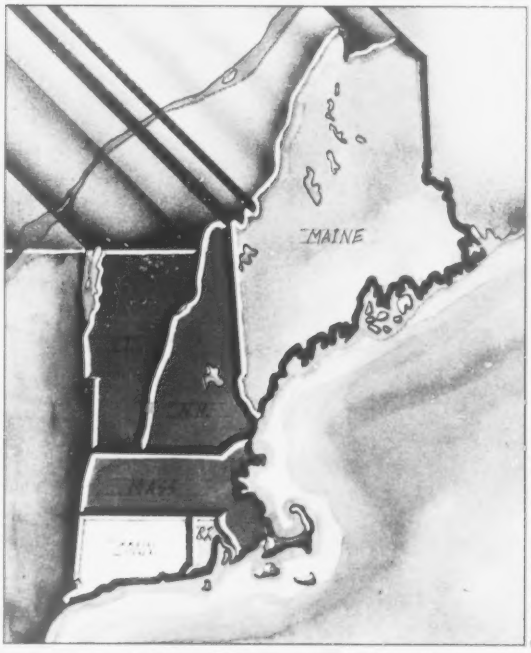
				Annual Percent Change			
General Economic Indicators	**Q3/88**	**Q2/89**	**Q3/89**	**1988**	**1989**	**1990**	**1991**
Gross National Product (1)	4042.7	4132.5	4162.9	3.1	2.9	2.1	3.0
Consumer Spending (1)	2698.1	2753.7	2790.1	3.4	2.7	1.9	2.6
Business Investment (1)	503.0	581.4	587.9	8.4	3.8	1.2	2.6
Industrial Production (2)	138.4	141.8	142.3	5.7	3.1	1.7	4.7
Prime Rate (3)	9.7	11.4	10.7	9.8*	10.8*	9.2*	9.3*
Consumer Price Index (4)	119.1	123.7	124.7	4.1	4.8	3.6	3.4
	Oct 88	**Sept 89**	**Oct 89**	**1988**	**1989**	**1990**	**1991**
Industrial Production (2)							
Printing and publishing	198.1	202.7	203.8	6.8	8.4	3.3	6.6
Newspapers	118.9	152.2	146.8	1.5	1.4	4.0	6.7
Periodicals, books, cards	181.6	207.3	208.2	8.9	11.9	2.7	7.3
Job printing	238.5	237.0	237.6	8.9	8.8	2.9	6.7
Industry Shipments (5)							
Newspapers, books, periodicals	n/a	n/a	n/a	5.4	8.6	1.8	3.5
Other publishing and printing	n/a	n/a	n/a	6.1	4.8	3.2	4.7

graphic arts monthly

New England Region

If you're looking at a map of the United States, New England is the upper right-hand corner. It is made up of six states: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.

It is, at least from the traditional Angiocentric point of view, just about the "oldest" region in the U.S. (Ponce De Leon was wandering around Florida looking for the Fountain of Youth a hundred years before the Pilgrims landed at Plymouth Rock, and, as any American Indian will be happy to explain, there were of course people already living in both places). New England is also, both in terms of land area and population, the smallest of the nine regions into which the Census Bureau divides the country. (See last month's GAM for a rundown on the various regions.)



Jana Brenning

Although it is in the Northeast, an area associated in most people's minds with big cities and congestion, New England is a surprisingly rural place. Only one of the Census Bureau's list of the 75 largest cities, Boston, is there. (By way of contrast, nine of them are in California alone, and seven of them are in Texas. As we will see later this year, the Old West ain't what she used to be.) The biggest towns in the other states are Providence, R.I. (158,000), Bridgeport, Conn. (142,000), Portland, Me. (62,600), Manchester, N.H. (97,000), and Burlington, Vt. (38,310).

This doesn't mean that New England is a sleepy farm belt. While there are (except Boston) no large cities in the area, one of the five most populous *counties* in the U.S. is Middlesex County, Mass. New England basically consists of towns and cities, pseudo-rural middle-class and upper-class suburbs, genuinely rural countryside, and picturesque coastline.

These demographic divisions reflect economic divisions. Southern Connecticut is really part of greater New York City, and Connecticut has the highest per-capita income of the 50 states. Maine and Vermont, by contrast, really *are* rural—and rank 38 and 35 in per-capita income, respectively.

As we will see in the next few pages, the printing industry in New England reflects some of these characteristics. It is relatively decentralized, made up of a high proportion of small shops, and much more important in some markets than in others.

Data for this report come primarily from Printing Industries of America, the National Association of Printers and Lithographers, the U.S. Bureau of the Census, Trade and Technology Press of Stamford, Conn. (the publishers of *Printmarkets*, a highly useful source of industry data), and GRAPHIC ARTS MONTHLY's own database.

Reprints may be ordered from Holly Hoffman, GAM, 249 W. 17th St., New York, N.Y. 10011.

By Peter Johnston
Special Projects Manager

Regional Overview

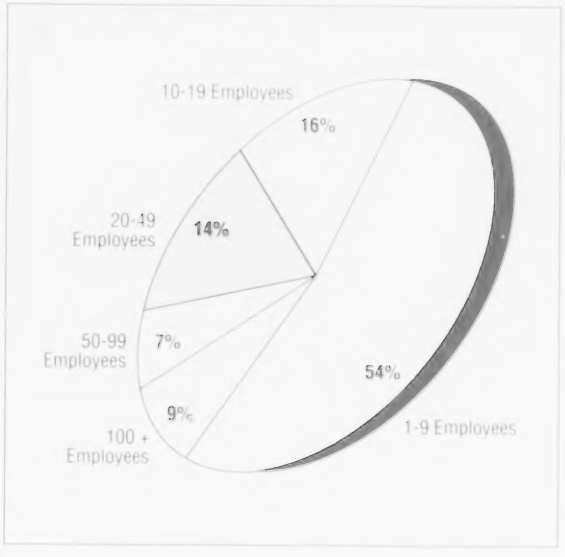
Note that these figures, taken from the GAM database, reflect the universe of printers in its widest sense. In most of the data on the next three pages, a smaller—though nonetheless still very large—universe of printers will be used. This is because we will be concerned with the way New England's printing industry is divided up in terms of the economic characteristics of the region's printing. This requires us to exclude newspapers, in-plant printers, and certain plants who, while clearly printers, are not *economically measurable* as printers.

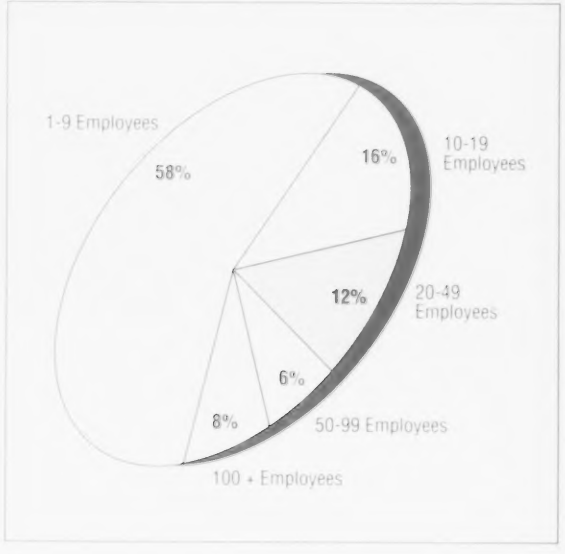
New England, Plants by Employee Count

Size	# of Plants	% of Region
1–9 Employees	1,933	54%
10–19 Employees	560	16%
20–49 Employees	496	14%
50–99 Employees	266	7%
100 + Employees	319	9%
TOTAL	3,574	100%

United States, Plants by Employee Count

Size	# of Plants	% of Region
1–9 Employees	29,815	58%
10–19 Employees	8,381	16%
20–49 Employees	6,428	12%
50–99 Employees	3,147	6%
100 + Employees	3,846	8%
TOTAL	51,617	100%





Charts by Lisa Hilgers

Plants by Function

Before making that slice, though, let's look at the New England macrocosm from another couple of angles, comparing it with the U.S as a whole. Note the relative scarcity of newspapers with commercial printing.

Function	# of Plants	% of US Total
Commercial	1,863	7.1%
Newspaper (w/Commercial)	91	3.7%
Newspaper (w/o Commercial)	155	6.8%
Book & Pub	181	7.1%
Business Forms	50	6.3%
Converters	131	6.9%
Noncommercial	482	6.2%
Trade	328	7.7%
Quick Printers	293	6.4%

Equipment Distribution

Equipment	Sites in Region	% of U.S. Total
Color Scanners	208	8.0%
Sheetfed Presses	2,525	6.8%
Heatset Web Offset Presses	262	2.9%
Folders	2,144	6.9%

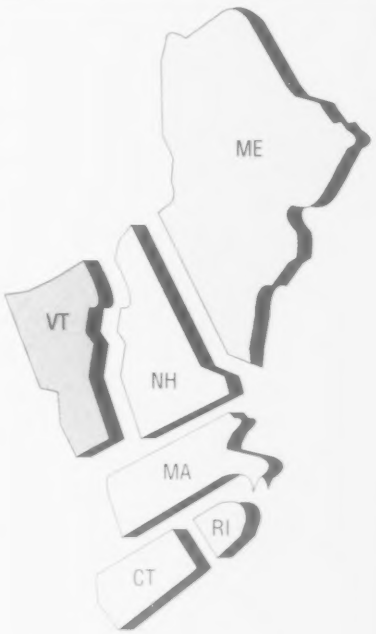
Here we see New England's geographic and demographic peculiarities reflected in its installed equipment base. Scanners, sheetfed presses, and folders follow the general contour of the industry; New England accounts for approximately 7.2% of total U.S. printing, as measured by the Department of Commerce. Heatset web offset presses, however, show less than half that incidence. These presses are most widely used in long-run work for national distribution—work for which New England is a geographically poor candidate.

Commercial Printing

Value of Shipments

This total sales figure is based on value of shipments; New England, with $4.86 billion, represents approximately 7.2% of the U.S. total of $67 billion. (Like most used in these reports, these figures are for 1988.) Market figures on the next two pages are based on a total U.S. sales universe of $69.8 million—again, a 4% difference attributable primarily to the fact that *Printmarkets*, a report that was published in December 1989, had more up-to-date information to work from.

State	Sales	%
Connecticut	1,300	27%
Maine	157	3%
Massachusetts	2,400	49%
New Hampshire	393	8%
Rhode Island	335	7%
Vermont	275	6%
TOTAL	4,860	100%

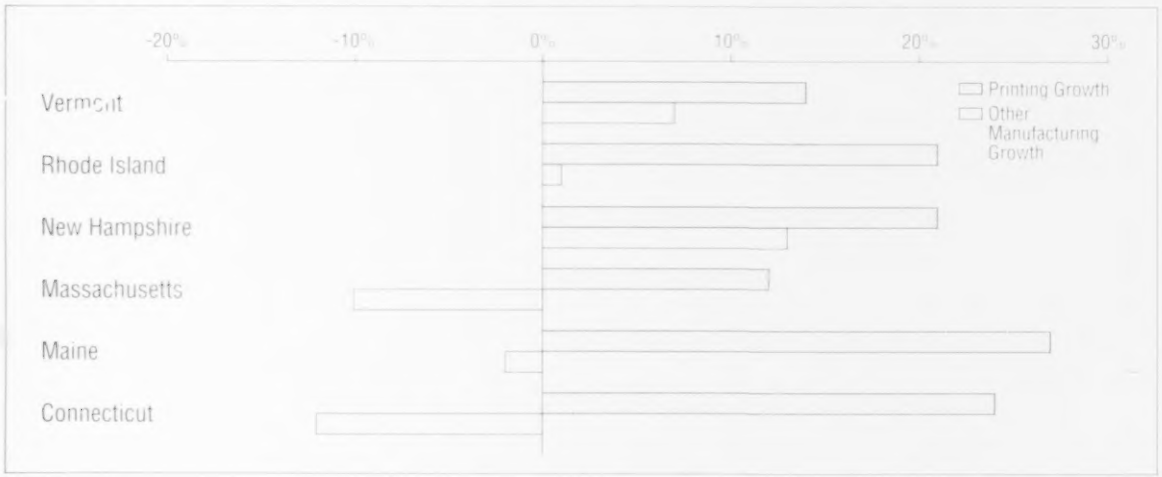


Printing Sites

State	Sites	%
Connecticut	666	29%
Maine	111	5%
Massachusetts	1,095	47%
New Hampshire	159	7%
Rhode Island	179	8%
Vermont	92	4%
TOTAL	2,302	100%

To compare this universe of printing sites with that given on the previous page, we turn back for a moment to the GAM database, which lists 3,574 sites in New England. Subtracting newspapers, in-plant printers, exclusively trade printers, and quick printers—none of which are covered in the rest of our data—yield a total of 2,225. This is within 4% of the Department of Commerce/PIA total of 2,302, which is as identical as we are likely to get.

Printing Employment Thrives in the Region



Just as in the nation overall, the printing industry in New England is creating jobs at a much higher rate than other manufacturing industries. In the three states of Connecticut, Massachusetts, and Maine, the number of jobs in other manufacturing industries is decreasing. Numbers for the region as a whole are impressive, and the growth rates for Maine and Connecticut are really startling. Connecticut, of course, is reaping some of the benefits of the flight of manufacturing out from New York City, and continuing to grow because of the relocation there of corporate headquarters adjacent to New York. Nonetheless, and no matter how you measure it, the printing industry is thriving in New England.

State	Employees
Connecticut	15,484
Maine	1,901
Massachusetts	28,929
New Hampshire	4,299
Rhode Island	3,875
Vermont	2,971
TOTAL	57,459

Leading Printers in Major Markets

Company	Location	Sales
BUSINESS FORMS PRINTERS		**Total 349.5**
New England Business Service	Groton, MA	115.0
Uniform Printing & Supply	Acton, MA	55.0
Wheeler Group (Pitney Bowes)	New Hartford, CT	26.0
Vermont Computer Forms/Grafton Division	Grafton, VT	25.0
Dennison Manufacturing	Waltham, MA	25.0
Recording and Statistical Corp.	Darien, CT	20.0
Hano Business Forms, Inc.	Springfield, MA	20.0
Formprint	Portland, ME	19.0
Regal Press, Inc.	Norwood, MA	16.5
Arthur Blank & Co.	Boston, MA	12.0
Acme Printing Company	Wilmington, MA	10.5
Arrow Business Forms, Inc.	Medfield, MA	4.0
Herlin Press, Inc.	West Haven, CT	1.5
BOOK PRINTERS		**Total 313.5**
R.R. Donnelley/Hudson Div.	Hudson, MA	75.0
Arcata Graphics/Halliday Div.	West Hanover, MA	48.0
Murray Printing (Courier Corp.)	Westford, MA	37.0
Semline, Inc. (Quebecor)	Braintree, MA	35.0
Rand McNally/Taunton Div.	Taunton, MA	30.0
Book Press, Inc. (Quebecor)	Brattleboro, VT	25.0
ZBR Publications	Wilmington, MA	15.0
Alpine Press (Courier Corp.)	Stoughton, MA	13.0
Federated Lithographers	Providence, RI	12.0
Concord Litho	Concord, NH	6.5
Eusey Press, Inc. (Quebecor)	Leominster, MA	5.0
Eastern Press	New Haven, CT	3.5
Holyoke Litho (Quebecor)	Springfield, MA	3.0
Capital City Press	Berlin, VT	3.0
Connecticut Printers Inc.	Bloomfield, CT	2.5
COMMERCIAL/SPECIALTY PRINTERS		**Total 309.7**
Dennison Manufacturing	Waltham, MA	60.0
New England Book Components	Hingham, MA	27.0
Acme Printing	Wilmington, MA	20.5
Finlay Brothers Company	Bloomfield, CT	19.5
Screenprint/Dow	Wilmington, MA	13.5
The Nimrod Press	Boston, MA	11.0
The Graphic Center	Bloomfield, CT	10.0
Eastern Press	New Haven, CT	9.5
Danbury Printing & Litho	Danbury, CT	9.2

Company	Location	Sales
Ames Safety Envelope	Somerville, MA	9.0
Spencer Press, Inc.	Wells, ME	9.0
Jay Printing Company	Warwick, RI	8.0
B&W Press Inc.	Danvers, MA	7.5
Recording and Statistical Corp.	Darien, CT	7.5
Eusey Press (Quebecor)	Leominster, MA	7.0
National Bickford Foremost	Providence, RI	7.0
Herlin Press, Inc.	West Haven, CT	6.0
Formprint	Portland, ME	6.0
W.E. Andrews (Graphic Industries)	Bedford, MA	6.0
Wheeler Group (Pitney Bowes)	New Hartford, CT	6.0
Allied Printing Services, Inc.	Manchester, CT	5.0
Rand McNally/Taunton Div.	Taunton, MA	5.0
W.E. Andrews (Graphic Industries)	Hartford, CT	5.0
Heminway Company	Waterbury, CT	5.0
Hano Business Forms, Inc.	Springfield, MA	4.0
ZBR Publications	Wilmington, MA	4.0
Arthur Blank & Co.	Boston, MA	4.0
Federated Lithographers	Providence, RI	4.0
W.E. Andrews (Graphic Industries)	Bedford, MA	3.0
Winthrop Printing	Boston, MA	3.0
Dartmouth Printing Company	Hanover, NH	3.0
Holyoke Litho (Quebecor)	Springfield, MA	2.0
Colonial Label (Denney Reyburn)	W. Bridgewater, MA	2.0
Arrow Business Forms, Inc.	Medfield, MA	1.5
LABEL/WRAPPER PRINTERS		**Total 256.5**
Dennison Manufacturing	Waltham, MA	100.0
Nashua Corporation	Nashua, NH	60.0
New England Business Service	Groton, MA	27.0
Label Art, Inc. (Transkrit)	Wilton, NH	19.0
GarDoc, Inc.	Milford, NH	16.0
Anco Packaging	Shelton, CT	10.5
Wheeler Group (Pitney Bowes)	New Hartford, CT	9.0
Screenprint/Dow	Wilmington, MA	8.5
Colonial Label (Denney Reyburn)	W. Bridgewater, MA	5.0
Herlin Press, Inc.	West Haven, CT	1.5
INSERT PRINTERS		**Total 201.0**
Treasure Chest/Boston	Taunton, MA	40.0
Treasure Chest/Windsor Locks	Windsor Locks, CT	36.0
Maxwell Commun./Providence	Providence, RI	32.0
Barbour & Barbour Associates	South Windsor, CT	25.0

Demographics in New England

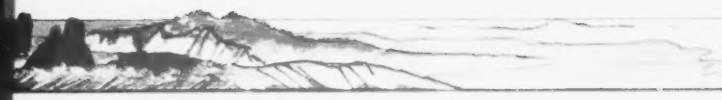
Population and Migration

State	Population (000)	Rank	Change (%, '80-'86)	Migration (See text)
Massachusetts	5,832	12	1.7%	−45,000
Connecticut	3,189	28	2.6%	−6,000
Maine	1,173	38	3.1%	44,000
New Hampshire	1,027	40	11.5%	67,000
Rhode Island	975	42	2.9%	7,000
Vermont	541	48	5.8%	8,000
TOTAL	**12,737,000**			

The net migration is the number of people moving into the state from outside the state or country. The combination of small population and low unemployment means that the available labor pool for an expanding

Potential Labor Pool

State	Age 15-24 (% Population)	Unemployment Rate (%)
Massachusetts	17.6%	3.8
Vermont	17.3%	4.7
Rhode Island	17.3%	4.0
New Hampshire	16.6%	2.8
Maine	16.0%	5.3
Connecticut	16.0%	3.8



NEW ENGLAND

Tables of leading printers given in order of overall market size. This will vary from region to region.

Company	Location	Sales
Eastern Color Printing	Avon, Ct	18.0
Perry Printing/Trumbull Div	Trumbull, CT	15.0
Spencer Press, Inc.	Wells, ME	13.0
Northeast Graphics, Inc.	North Haven, CT	10.0
Reminder Press	Vernon, CT	7.0
Danbury Printing & Litho	Danbury, CT	5.0
ADVERTISING PRINTERS		**Total 169.4**
Mark-Burton Inc.	Boston, MA	23.0
Daniels Printing	Everett, MA	21.0
W.E. Andrews (Graphic Industries)	Bedford, MA	14.0
Eusey Press (Quebecor)	Leominster, MA	13.0
National Bickford Foremost	Providence, RI	12.5
Winthrop Printing	Boston, MA	11.0
Herlin Press, Inc.	West Haven, CT	9.0
Nimrod Press	Boston, MA	9.0
Concord Litho	Concord, NH	7.0
Danbury Printing & Litho	Danbury, CT	7.0
W.E. Andrews (Graphic Industries)	Hartford, CT	6.0
United Litho (Hub Mail Adv.)	Somerville, MA	6.0
The Graphic Center	Bloomfield, CT	5.0
Regal Press, Inc.	Norwood, MA	5.0
Kurt H. Volk, Inc.	Milford, CT	5.0
Allied Printing Services	Manchester, CT	4.5
Harty Press, Inc.	New Haven, CT	3.4
Northeast Graphics, Inc.	North Haven, CT	3.0
Connecticut Color USA, Inc.	West Haven, CT	3.0
Hub Mail Advertising Services	Boston, MA	2.0
MAGAZINE PRINTERS		**Total 114.7**
R.R. Donnelley/Old Saybrook	Old Saybrook, CT	40.0
The Lane Press, Inc.	S. Burlington, VT	31.5
Connecticut Printers Inc.	Bloomfield, CT	13.0
Capital City Press	Berlin, VT	11.5
Hughes Printing (Monroe)	Trumbull, CT	9.0
Wellesley Press Inc.	Framingham, MA	6.7
Danbury Printing & Litho	Danbury, CT	3.0
DIRECT MAIL PRINTERS		**Total 95.0**
Northeast Graphics, Inc.	North Haven, CT	14.0
Danbury Printing & Litho	Danbury, CT	12.0
Kurt H. Volk, Inc.	Milford, CT	11.0
Modern Printing (Quebecor)	Brookfield, CT	10.0
Hub Mail Advertising Services	Boston, MA	10.0
United Litho (Hub Mail Adv.)	Somerville, MA	10.0
Concord Litho	Concord, NH	8.0
B&W Press Inc.	Danvers, MA	5.0
Hano Business Forms, Inc.	Springfield, MA	5.0
Harty Press, inc.	New Haven, CT	4.0
Connecticut Color USA, Inc.	West Haven, CT	4.0
Arrow Business Forms	Medfield, MA	2.0
GREETING CARD PRINTERS		**Total 87.5**
Paramount Cards Inc.	Pawtucket, RI	39.0
Renaissance Greeting Cards	Sanford, ME	19.0
Wheeler Group (Pitney Bowes)	New Hartford, CT	17.0
Concord Litho	Concord, NH	7.0
Rainboworld (Masterpiece Studios)	Boston, MA	5.5
CATALOG PRINTERS		**Total 77.0**
Spencer Press, Inc.	Wells, ME	32.0
Danbury Printing & Litho	Danbury, CT	12.0
R.R. Donnelley/Old Saybrook	Old Saybrook, CT	10.0
The Dingley Press	Lisbon, ME	9.5
Connecticut Printers Inc.	Bloomfield, CT	6.5
Federated Lithographers	Providence, RI	4.0
Northeast Graphics, Inc.	North Haven, CT	3.0
DIRECTORY PRINTERS		**Total 45.0**
North American Directory Corp.	Lowell, MA	45.0
PREPRESS SHOPS		**Total 19.2**
Colotone, Inc. (Colotone)	North Branford, CT	6.0
Colotone Graphics	North Branford, CT	6.0
W.E. Andrews (Graphic Industries)	Bedford, MA	2.5
National Bickford Foremost	Providence, RI	2.5
NK Graphics	Keene, NH	2.2
FINANCIAL/LEGAL PRINTERS		**Total 18.0**
Daniels Printing Co.	Everett, MA	16.0
Arrow Business Forms, Inc.	Medfield, MA	2.0

Note: Information for this listing is derived from *Printmarkets*, a report published by Trade and Technology Press, Stamford, Conn., and is based on data provided directly by the companies involved.

graphic arts industry in New England is not enormous; however, it is, as might be expected, relatively well educated. Connecticut leads in per capita income, though much of its banking, as is shown here, is done in New York City.

Educational Attainment

State	High School (12+ years)	College (16+ years)
New Hampshire	72.3%	18.2%
Massachusetts	72.2%	20.0%
Vermont	71.0%	19.0%
Connecticut	70.3%	20.7%
Maine	68.7%	14.4%
Rhode Island	61.1%	15.4%

Income and Bank Deposits

State	Income (Per Capita)	Rank	Bank Deposit Increase 1985–1986, %
Connecticut	$14,090	1	15.1%
Massachusetts	12,510	5	30.6%
New Hampshire	11,659	10	25.1%
Rhode Island	10,892	18	25.9%
Vermont	9,619	35	10.0%
Maine	9,042	38	11.4%

Coming Next Issue: The next installment in the Geography of Print series profiles the South Atlantic region, composed of Delaware, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, Washington, D.C., and West Virginia.

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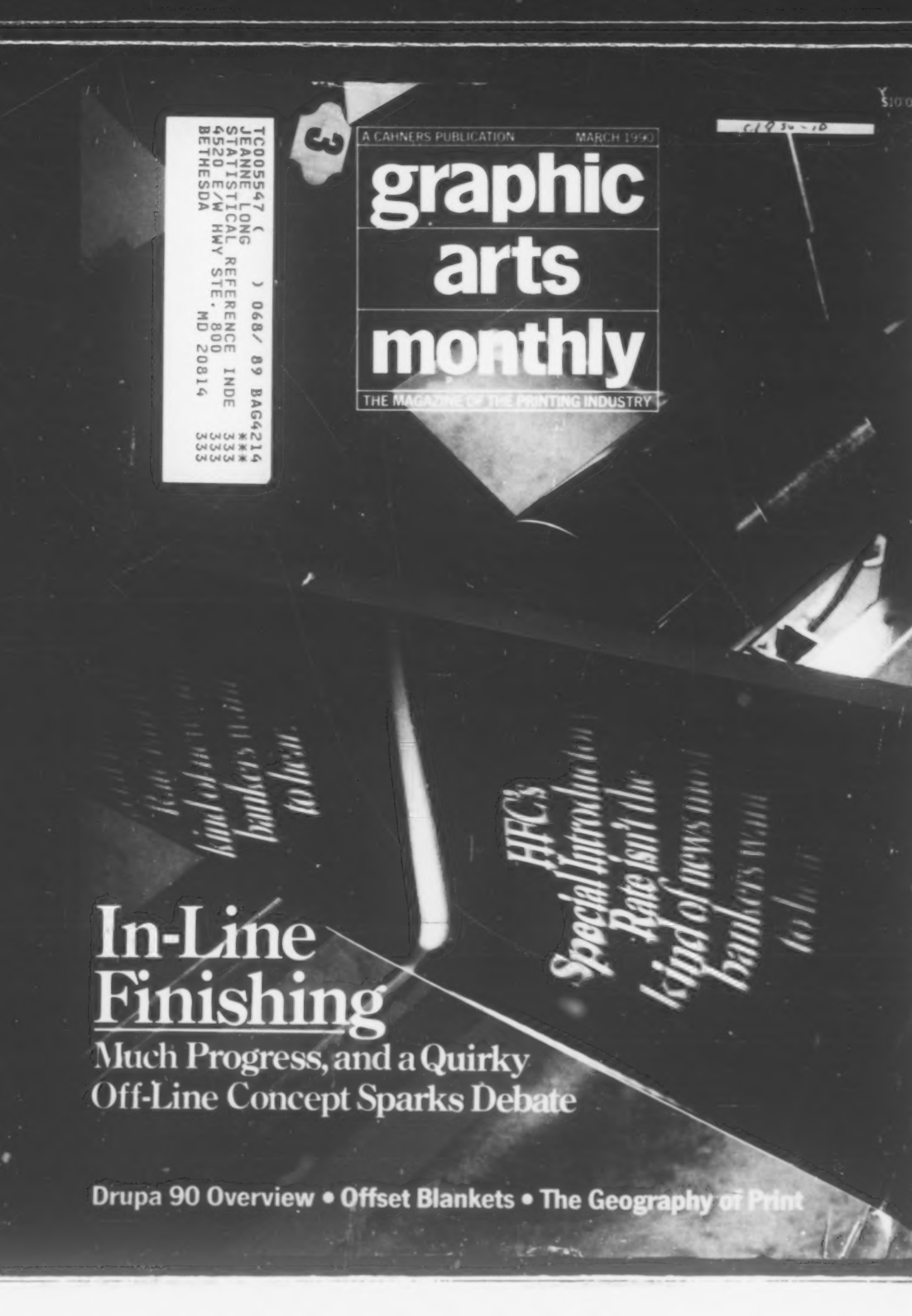

In-Line Finishing

Much Progress, and a Quirky Off-Line Concept Sparks Debate

Drupa 90 Overview • Offset Blankets • The Geography of Print

A CAHNERS PUBLICATION MARCH 1990

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1990: Strong Growth for Some Sectors

DATATABLE

END MARKET INDICATORS

				Annual Percent Change			
	1988	1989	1990	88	89	90	91
Consumer Spending (1)							
Publishers' Sales (2)							
Print Advertising Expenditures (3)							

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South Atlantic Region

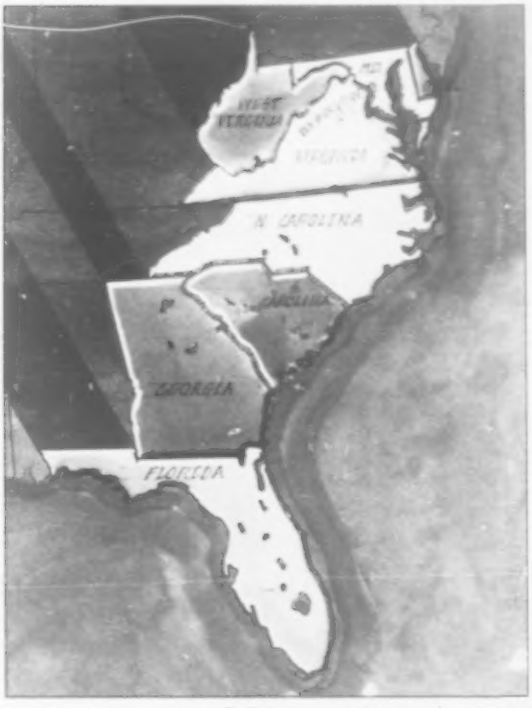


Illustration by Holly

The South Atlantic is probably the most varied of the regions into which the country is divided by the Census Bureau. The region runs from the north end of Delaware, which abuts Philadelphia, to Key West. It may be an anomaly, but blame it on the Census Bureau. In the course of this great southward meander, the South Atlantic takes in eight states and a territory. Reading down the map, they are the following: Delaware, Maryland, the District of Columbia, West Virginia, Virginia, North Carolina, South Carolina, Georgia and Florida.

The District of Columbia has one of the highest per-capita income averages in the country ($13,530); West Virginia ranks 49 out of 50 states, at $8,141. Florida is one of the most populous states, with almost 12 million people. Delaware and the District of Columbia each have a little over 625,000. (This similarity has not been overlooked by residents of the District, who wonder why they can't be a state too. The debate is emotional and complicated; suffice to say, though, that DC is an amalgam of the very rich and very poor.)

The District of Columbia, of course, is a company town. Maryland and northern Virginia are to a considerable extent suburbs of Washington and share in its prosperity. West Virginia, by contrast, is part of the economically depressed Appalachian Mountain region, as is a fair chunk of northwestern North Carolina. The rest of North Carolina has been enjoying a boom in recent years, as have been (to a somewhat lesser extent) South Carolina and parts of Georgia.

Then there's Florida, where half the world seems to want to live, snuggled up next to Mickey, Goofy, Sonny Crockett, and Dumbo the Flying Elephant. Florida's *really* booming, in the printing industry as in theme parks and orange juice. The region had 1988 printing sales of around $9.6 billion, of which Florida alone had 23%. As you'll see in the following pages, most of these states have a reasonably busy printing sector. The exceptions are West Virginia, which is impoverished, and Delaware, which most likely has its printing done in Maryland and Pennsylvania.

Data for this report come primarily from Printing Industries of America, the National Association of Printers and Lithographers, the U.S. Bureau of the Census, Trade and Technology Press of Stamford, Conn—the latter is publisher of *Printmarkets*, a highly useful source of industry data—and Graphic Arts Monthly's own database.

Reprints of this installation of the Geography of Print may be ordered from Holly Hoffman, GAM, 249 W. 17th St., New York, NY 10011.

By Peter Johnston
Special Projects Manager

Regional Overview

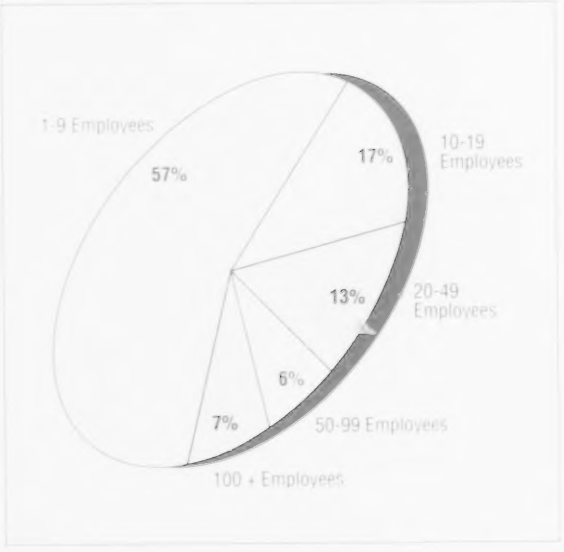
Note that these figures, taken from the GAM database, reflect the universe of printers in its widest sense. In most of the data on the next three pages, a smaller—though nonetheless still very large—universe of printers will be used. This is because we will be concerned with the way South Atlantic's printing industry is divided up in terms of the economic characteristics of the region's printing. This requires us to exclude newspapers, in-plant printers, and certain plants who, while clearly printers, are not *economically measurable* as printers.

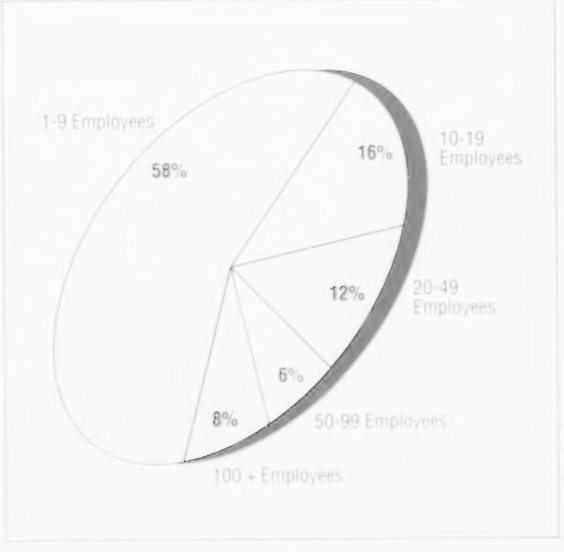
South Atlantic, Plants by Employee Count

Size	# of Plants	% of Region
1–9 Employees	4,172	57%
10–19 Employees	1,215	17%
20–49 Employees	912	13%
50–99 Employees	416	6%
100 + Employees	551	7%
TOTAL	7,266	100%

United States, Plants by Employee Count

Size	# of Plants	% of Total
1–9 Employees	29,815	58%
10–19 Employees	8,381	16%
20–49 Employees	6,428	12%
50–99 Employees	3,147	6%
100 + Employees	3,846	8%
TOTAL	51,617	100%





Charts and graphs by Lisa Hilgers

Plants by Function

Overall, the region accounts for around 14.5% of the total U.S. industry. Plants pretty well reflect that by function, though there are some variances, especially in newspapers and quick printers.

Function	# of Plants	% of US Total
Commercial	3,599	14%
Newspaper (w/ Commercial)	177	11%
Newspaper (w/o Commercial)	311	14%
Book & Pub	380	
Business Forms	100	13%
Converters	241	13%
Noncommercial	1,138	15%
Trade	524	12%
Quick Printers	796	17%

Equipment Distribution

Equipment	Sites in Region	% of U.S. Total
Color Scanners	401	15%
Sheetfed Presses	3,453	15%
Heatset Web Offset Presses	539	14%
Folders	4,574	15%

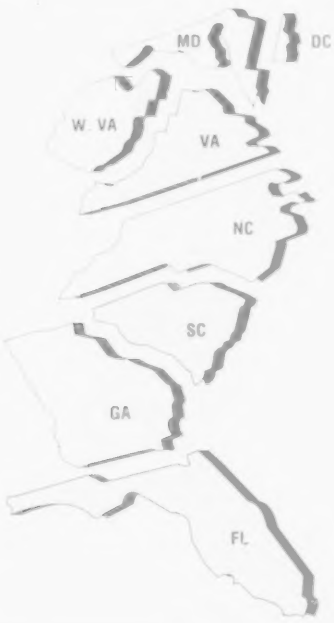
When we looked at this last month, for New England, we saw a number of variances with the region's overall size. By contrast, the South Atlantic region follows the pattern of its size almost exactly. A state-by-state analysis (for which we unfortunately have no room) would show some interesting contrasts. There would be a bulge in color scanners in Florida, where a large number of separators have set up shop over the past decade, and a similar bulge in web offset press lines in Virginia, Maryland and North Carolina.

Commercial Printing

Value of Shipments

At $9.95 billion, the South Atlantic represents 14.5% of total U.S. printing. The Big Five in this region are clearly Florida, Georgia, Maryland, Virginia, and North Carolina. Delaware comes in dead last with just over $100 million in printing sales--though as the nominal headquarters for many corporations, it engenders a lot of printing.

State	Sales	%
Florida	2,200	23%
Georgia	1,800	19%
Maryland	1,600	17%
Virginia	1,600	17%
North Carolina	1,400	14%
South Carolina	503	5%
District of Columbia	221	2.3%
West Virginia	165	1.7%
Delaware	105	1%
TOTAL	9,594	100%

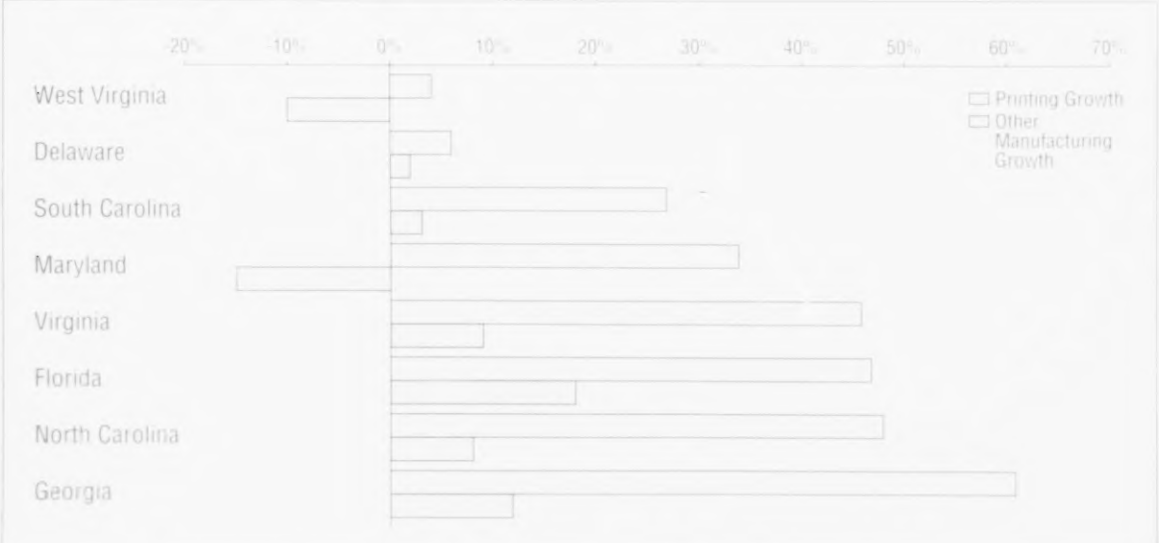


Printing Sites

State	Sites	%
Florida	1,724	28.7%
Georgia	1,600	26.6%
North Carolina	765	12.7%
Virginia	669	11.2%
Maryland	656	10.9%
South Carolina	262	4.4%
District of Columbia	163	2.7%
West Virginia	103	1.7%
Delaware	69	1.1%
TOTAL	6,011	100%

Between the two of them, Florida and Georgia have over 55% of the sites in the entire region. This reflects the concentration of very large printers in the northern part of the region--closer to national audiences. While Georgia is only 11% larger than Maryland in terms of printing *sales*, it has nearly two and a half times as many sites. The average volume of these sites is smaller.

Industry Outperforms All Manufacturing Segments



The unemployment rate in West Virginia is 11.8%; in Maryland, where unemployment is a reasonable 4.5%, non-printing manufacturing jobs are declining at 10% per year. As can be seen here, the industry outperforms the overall manufacturing sector everywhere in the region, most spectacularly in Georgia (though for the most part other manufacturing is also healthy in the South Atlantic).

State	Employees	State	Employees
Florida	26,589	South Carolina	5,603
Georgia	21,300	District of Columbia	2,600
Maryland	19,097	West Virginia	1,657
Virginia	18,524	Delaware	1,319
North Carolina	16,175	TOTAL	112,864

Leading Printers in Major Markets

Company	Sales
COMMERCIAL SPECIALTY	**Total 1107.7**
INSERT	**Total 602.0**

Company	Sales
FINANCIAL LEGAL	**Total 502.0**
MAGAZINE	**Total 490.8**

Company	Sales
BUSINESS FORMS	**Total 412.1**
CATALOG	**Total 381.5**
BOOK	**Total 304.1**

SOUTH ATLANTIC

Tables of leading printers given in order of overall market size. This will vary from region to region.

Company	Sales
ADVERTISING	**Total 257.0**

Company	Sales
DIRECTORY	**Total 204.0**
DIRECT MAIL	**Total 148.5**

Company	Sales
PREPRESS	**Total 141.2**
LABEL/WRAPPER	**Total 103.6**

Demographics in South Atlantic

The demographics of the South Atlantic region mirror the disparate nature of the various states. As might be expected, Florida is somewhat below the average in people 15-24 years old (though with its huge overall numbers this may not matter). The region as a whole slightly lags the U.S. in educational attainment (except for Maryland, Delaware, and the District of Columbia).

Population and Migration

State	Population (000)	Rank	Change (%, '80-'86)	Migration (See text)
Florida	11,675	5	19.8%	1,704,000
North Carolina	6,333	10	7.7%	230,000
Georgia	6,104	11	11.7%	354,000
Virginia	5,787	13	8.2%	202,000
Maryland	4,463	19	5.8%	65,000
South Carolina	3,377	24	8.2%	96,000
West Virginia	1,918	34	1.6%	74,000
Delaware	633	47	6.5%	13,000
DC	626.1	0	1.9%	29,600
TOTAL	40,916,100			

Potential Labor Pool

State	Age 15-24 (% Population)	Unemployment Rate (%)
DC	18.9%	7.7
South Carolina	18.4%	6.2
Delaware	18.0%	4.3
Virginia	17.7%	5.0
North Carolina	17.7%	6.3
Georgia	17.6%	5.9
Maryland	17.0%	4.5
West Virginia	16.2%	11.8
Florida	15.0%	6.7

Educational Attainment

State	High School (12+ years)	College (16+ years)
Delaware	66.6%	17.5%
Maryland	67.4%	20.4%
DC	67.1%	27.5%
Florida	66.7%	14.9%
Virginia	62.4%	19.1%
Georgia	56.4%	14.6%
West Virginia	56.0%	10.4%
North Carolina	54.8%	13.2%
South Carolina	54.7%	13.4%